34. TRICHOTROMBIDIUM MUSCARUM KOLONEV, A NEW ACARINE PARASITE ON HOUSE FLY

(With a text-figure)

House fly (Musca domestica nebulo Fabricius) is attacked by a number of natural enemies. Among the acarine parasites, Roy and Brown (1970) mentioned certain species of Gamasus and Tyroglyphus often parasitising fly pupae and sometimes larvae also. Other mites recorded as parasites of housefly include undetermined species of Microtrombidium (Acarina: Trombidiidae) (Dhiman and Dhiman 1981) and Peymotes (Acari: Peymotidae) (Dhiman and Mittal 1984). Recently during October, 1985, adults of the housefly collected from students' hostel and cafetaria in the premises of the Agricultural College Dharwad (Karnataka State) were found parasitised by a mite larva subsequently identified as Trichotrombidium muscarum Kolonev (Acari: Trombidiidae) (Fig. 1). This is a new record of T. muscarum as a parasite on housefly. The characteristic feature of the members of Trombidiidae is that they are parasitic only during larval stage (some of which are reddish due to pigments in their tissues) but are free living later on (Roy and Brown 1970). The larva of T. muscarum was red, measuring 0.67 mm in length and 0.38 mm in breadth. Although the larvae were found in all parts on the ventral surface of the body, the lateral abdominal and lower surface of the wings attached to the thorax were the preferred regions. The number of mite larvae on a single individual varied from two to six. Flies having more than three mites per individual died within three to six hours of collection.

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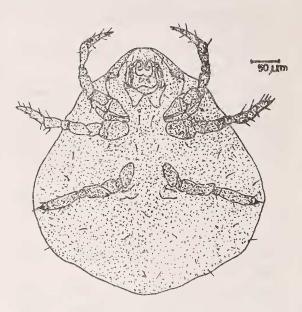


Fig. 1. Larva of Trichotrombidium muscarum Kolonev.

An unidentified *Trombidium* found on *Phlebotomus* flies has been suspected to be the carrier of a virus causing Phlebotomus fever in man (McCombie Young *et al.* 1926). It is therefore, necessary to make detailed observations on the development of *T. muscarum*, its association with housefly and effect on man and domestic animals before it is considered as a biological control agent against housefly.

We are grateful to Dr. D. Macfarlane, Commonwealth Institute of Entomology, London (U.K.), for identifying the mite.

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MISCELLANEOUS NOTES

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35. OVIPOSITION SITE AND NATURE OF DAMAGE OF NIGER CAPSULE FLY *DIOXYNA SORORCULA* (WIED.) (DIPTERA: TAPHRETIDAE)

(With a text-figure)

During the survey of insect pests of niger at Jabalpur (M.P.) the capsule fly Dioxyna sororcula (Wied.) was observed for the first time on niger infesting developing seeds in the seed capsule (Jakhmola 1984). In the present investigation a new site for egg laying by the fly was observed. The female fly laid the eggs in the inflorescence inside the ovaries of disc florets by inserting its ovipositor. The egg remains attached to the terminal end of the ovary (Fig. 1). Eggs were laid singly and only one egg was laid in an ovary. The eggs were creamy white in colour and measured 0.69 mm. in length and 0.16 mm. in width. This finding contradicts that of Jakhmola (1984) who reported that the female fly laid the eggs between the disc florets.

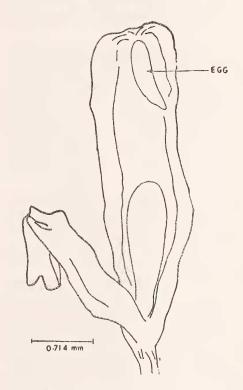


Fig. 1. Exposed ovary of niger showing the egg laid at the terminal portion of the ovary.